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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,188	02/12/2002	Peter G. Loges	56326-041 (IOPL-119)	6665

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EXAMINER

FASTOVSKY, LEONID M

ART UNIT PAPER NUMBER

3742

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/074,188

Applicant(s)

LOGES ET AL.

Examiner

Leonid M. Fastovsky

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 1018.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,12-24 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,12-24 and 26-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1- 4, 6-8, 12-13, 22-24, 26-29 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moldenhauer in view of Maxson (1,697,607) and Pritzker.

With regard to claims 1-2, 4, 6-8, 22-23 and 26-28, Moldenhauer teaches a radiation source comprising a base 7, a curved parabolic reflector 2, two pins 6 passing through the base 7, a first pin having a first portion, that extends at an angle with respect to the axis, a second pin having a second portion which extends at an angle with respect to the axis, a filament 11 helically wound around the pins such that pins are located between the filament and the axis of the reflector, a window 3, and an inert gas contained within the enclosure, and the coil 12 –furthest from the base is offset from the axis (related to claim 32).

Further, Moldenhauer discloses the filament, the filament helically wound filament and has a diameter 12 that decreases along the axis and that a width of the filament 11 is greater than space between adjacent coils 11 and 12 according to the drawing.

However, Moldenhauer does not disclose a material of the filament.

Maxson discloses a radiation source having a flat, helically wound filament 10 (Fig. 1-5) made out of nickel steel (col. 1, lines 46-54). It would have been obvious to one having ordinary skill in the art to adapt a modified invention of Moldenhauer to include a flat, helically wound filament made out of nickel steel as taught by Maxson in order to provide suitable resisting material which will not deteriorate under heat (col. 1, lines 46-54 and col. 2, line 1).

In addition, since Moldenhauer does not disclose specifically about the space between coils in the specification, it would have been obvious to one having ordinary skill in the art to modify the invention of Moldenhauer in view of Maxson to include in the helically wound filament having a diameter decreasing along the axis a width greater than the space between adjacent coils as taught by Pritzker (Fig. 1) as a matter of design choice, since the applicant has not disclose that this type of filament solved any problems or is for any particular purpose, and it appears the invention would perform equally well with the existing filament. Moreover, as stated on Page 6 (Paragraph 25), the filament can be provided with a constant diameter.

With regard to claims 3, 12-13, and 29, Moldenhauer and Maxson do not disclose an elliptic reflector comprising a non-ferrous metal, and coated or plated with at least one of the aluminum, gold and silver, and that the second pin includes a third portion and a fourth portion. It would have been obvious to one having ordinary skill in the art to adapt a modified invention of Moldenhauer and Maxson to use materials and an elliptic reflector as a matter of design choice, since the applicant has not disclose that these

materials and elliptic reflector solved any stated problems or is for any particular purpose, and it appears that the invention would perform equally well with existing materials and reflector's shape.

As for claims 31 and 33, Maxson discloses that the coil closest to the base is aligned with the axis. It would have been obvious to modify Moldenhauer's invention to include the coil closest to the base aligned with the axis and use just two coils of Maxson's invention as a design choice, since the applicant has not disclose that this type of filament solved any problems or is for any particular purpose, and it appears the invention would perform equally well with the existing filament.

3. Claims 5, and 14- 21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Moldenhauer in view of Maxson and Pritzker and further in view of Boland et al and George et al.

Moldenhauer in view of Maxson and Pritzker discloses substantially the claimed features including a radiation source comprising a base, a curved reflector, two pins passing through the base, a filament helically wound around the pins, and a window. However, Moldenhauer in view of Maxson and Pritzker does not disclose that the window is made out of different materials, filament textured features, and emissions cut-off wavelength. Boland et al shows that window includes a sapphire and germanium (Col. 3, lines 50-65), George et al shows filament textured features (Col. 2, [11]), and Boland et al shows a cut-off wavelength (Col. 2, lines 50-65). It would have been obvious to one having ordinary skill in the art to adapt a modified invention of Moldenhauer in view of Maxson to use materials and a cut-off wavelength size as

taught by Boland and filament textured features as taught by George et al in order to select an infrared wavelength spectrum as required by the user.

4. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moldenhauer in view of Maxson and Pritzker as applied to claims 1-4, 6-13, 22-23 and 25-29 and further in view of Karlsson.

Moldenhauer in view of Maxson and Pritzker discloses substantially the claimed invention, but does not disclose pin materials. Karlsson shows pins 4,5 are made from Kovar material (col. 6, lines 56-59). It would have been obvious to one having ordinary skill in the art to adapt a modified invention of Moldenhauer in view of Maxson and Pritzker to use Kovar as taught by Karlsson as a functional equivalent material.


Response to Arguments

Applicant's arguments filed 8/18/05 have been fully considered but they are not persuasive. Moldenhauer in view of Maxson discloses that the filament forms at least two coils and at least one of the coils - coil 12, that is furthest from the base 7, is offset from the axis that is going through the middle of the radiation source.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid M Fastovsky whose telephone number is 571-272-4778. The examiner can normally be reached on M-Th. 8.00 am -6.00 pm.

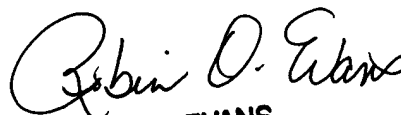
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Leonid M Fastovsky
Examiner
Art Unit 3742

lmf

10/26/05


ROBIN O. EVANS
PRIMARY EXAMINER
10/31/05